

ATTACHMENT A

REMARKS

Claims 32-41 have been rejected under 35 U.S.C. § 112, first paragraph, as "failing to comply with the enablement requirement" and have been rejected under 35 U.S.C. § 112, second paragraph, as being "indefinite." In addition, claim 32 has been "provisionally rejected on the ground of nonstatutory obviousness – type double patenting as being unpatentable over claims 35-37 of co-pending Application No. 11/271,799."

Considering the latter rejection first, a suitable terminal disclaimer has been submitted herewith in order to overcome this rejection. Hence, it is respectfully submitted that the provisional "double patenting" rejection of Claim 32 can properly be withdrawn.

As indicated above, the Examiner rejected claims 32 to 41 under 35 U.S.C. §112 as variously failing to comply with the enablement requirement and as being indefinite. Applicant is grateful for the Examiner's detailed review of the claims and numerous suggestions for their amendment, which have largely been adopted in this response (including the deletion of several terms to which the Examiner objects as being unclear or lacking support).

Applicant therefore does not comment on every objection, but adds the following observations concerning a number of minor departures from the Examiner's suggestions.

In paragraph 5 the Examiner expresses the concern that the term "transmitting said specific signal structures to said USB devices" is unclear. Three interpretations are suggested.

The Examiner has correctly perceived that the original wording covers all three interpretations as, indeed, all three are possible. However, this portion of claim 32 has been amended, for clarity, to read "transmitting to each of said plurality of USB devices at least one of said specific signal structures." This wording is—appropriately—silent on whether the signal structures are of the same type or different and whether single or a plurality of signal structures are sent to each USB device. This portion of the claim, as amended, is clear as all three possibilities are clearly embraced.

Further, all three alternatives are supported by the original specification. Claim 32 as filed referred to “generating or designating specified signal structures for transmission in the USB data traffic; transmitting said specified signal structures to said USB device in a predefined sequence” for the local clock of each of the plurality of USB devices. No limitation as to the identity of the signal structures is defined or recited, and there is no limitation that each USB device receives only one signal structure. In this light, all three interpretations would be readily understood by a person of ordinary skill in the art and an example of any one of them (as is indeed provided by the specification), could be readily implemented by that person.

It is respectfully submitted, therefore, that this feature is both clear and enabled.

In paragraph 6 the Examiner raises the objection that “a predefined sequence” is unclear so, as mentioned above, these words have been removed. The Examiner also raises the objection that “programmable sequences bit patterns” is unclear: this term has been amended to read “other predetermined bit patterns”, which better defines the intended feature whereby the trigger request signal can comprise essentially any other specified or “predetermined” bit pattern.

With these amendments it is respectfully submitted that this portion of claim 32 is both clear and enabled.

In paragraph 7 the Examiner questions the feature “generating second event trigger signals... corresponding to decoding of response signals from each of said USB devices.” As becomes apparent in due course as the claim language unfolds, the first event triggering signals and the second event triggering signals are employed when, as recited subsequently in the claim, the method includes measuring respective time intervals between “said first and second event trigger signals” for the plurality of USB devices. It is clearly within the scope of the invention that either a single or a plurality of time intervals may be measured for any particular USB device. Indeed, the person of ordinary skill in the art would appreciate that multiple measurements can be employed to ensure greater accuracy.

Given that there is a plurality of USB devices, it therefore, is appropriate to refer to “first event triggering signals” and “second event triggering signals”, but it is conceded that reference to “each of said USB devices” may introduce an element of

uncertainty that has been identified by the Examiner. Thus, this portion of the claim has been amended to refer to “generating second event triggering signals local to said master USB device corresponding to decoding of response signals from said plurality of USB devices.”

With respect to paragraph 19, the proposal of the Examiner has been accepted, except that “relative propagation time” has been retained instead of the Examiner's suggestion of “propagation time.” The previous clause of this claim refers to the determination of propagation times; this subsequent clause defines the determination of relative propagation times, by determining a difference between the propagation time of the reference USB device and the propagation time of the other USB devices. For this reason the propagation times determined in the clause in question are indeed “relative” propagation times, and should be distinguished in this manner from the mere “propagation times” of the previous clause.

In other respects, however, the suggestion of the Examiner has been implemented.

The Examiner suggests that lines 16 to 17 should also be amended to reflect these changes, but on closer inspection it is apparent that lines 16 to 18 of claim 32 merely summarise step (b) of claim 32 without themselves adding any further limitation. Accordingly, lines 16 to 18 have been deleted.

Regarding paragraph 26, the Examiner expresses concern that it is unclear how each of the plurality of USB devices can execute the same single trigger request. The confusion may arise from the fact that lines 6 to 8 of claim 34 add little to what is recited at lines 11 to 13, apart from defining the “trigger request signal” and the “trigger command signal”. Accordingly, claim 34 has been amended by deleting claims 6 to 8 and reproducing those definitions in the subsequent paragraph. Lines 11 to 13 make it clear how each of the plurality of USB devices can execute the same single trigger request.

The Examiner subsequently queries how the same single trigger command is decoded with each of a plurality of USB devices. A person of ordinary skill in this art would appreciate that such commands are broadcast from the USB host to all USB devices ultimately connected to that host. Each USB device uses the USB data packet

headers to decode and select only those commands specifically designated for it, even though the commands are broadcast or transmitted to all USB devices. Hence, once the trigger command has been inserted into the USB data traffic it will, in due course, be received by all of the USB devices and hence can be decoded by each of the USB devices: the present invention utilises this technique to full advantage.

It is respectfully submitted, therefore, that this proportion of claim 34 is indeed clear and enabled, and would be appreciated as such by a person of ordinary skill in this art.

The Examiner subsequently queries whether each USB device executes one or more processes (so that there are at least as many processes in total as there are USB devices) or whether the USB devices together—that is, acting in concert—execute one or more processes (so that there may be as few as only one process in total). This question relates to an important benefit of the invention, and, in fact, both cases are possible. In the second case, the ensemble of USB devices can behave as one device because they are part of a unified synchronized bus, and hence can act as a single coordinated device. Also, where plural processes are executed (whether by each USB device or by the ensemble of USB devices) they may be the same or different. What is important is that, no matter how many processes are to be executed, each process or all processes can be initiated at a predetermined time despite the involvement of a plurality of separate USB devices. Claim 34 has been amended to clarify this point. In addition, new dependent claims 51 to 54 have been introduced, directed to these various scenarios, to further clarify that claim 34 indeed embraces each of the interpretations suggested by the Examiner.

Finally, it will be noted that the phrase “on a plurality of USB devices connected to a common USB host according to a predefined trigger command” in lines 2 and 3 have been deleted, as these features are either already contained in claim 34 because of its dependence on claim 32, or are defined later in claim 34. (Also, amendments presently made in response to paragraph 26 of the Office Action render the Examiner’s observations in paragraph 25 moot.)

Favorable consideration is respectfully requested. In this regard, as set forth above, Applicant has made an earnest effort to address each and every issue raised

during in the Office Action, and it is believed that the amendments made to the claims and the explanations provided overcome both rejections under 35 USC 112. Given the nature of the rejections, and in particular, the rejection under 35 USC 112, second paragraph, if the Examiner believes that any problems remain, the Examiner is respectfully urged to telephone the undersigned so that these problems may be resolved. Alternatively, if this response does not place the application in condition for allowance, the undersigned requests an interview so that any potential problems that still remain can be addressed at such an interview and this application than placed in condition for allowance.

Allowance of the application in its present form is respectfully solicited.

END REMARKS